From: Charles Karney
To: Microsoft ATR
Date: 1/5/02 3:53pm
Subject: Microsoft Settlement

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Re: Proposed Settlement in United States vs Microsoft

I have used computers professionally for the past 30 years. Currently I am employed by Sarnoff Corporation, Princeton, NJ. In this position, I have, for the past two years, coordinated the research computing needs of a start-up company, Locus Discovery, Inc. Locus Discovery uses novel computational techniques to design small-molecule drugs, and at the core of this method is software running on a 2000-processor computer cluster running the Linux operating system.

Linux has provided a incredible opportunities to deploy massive computing resources in an extremely cost-effective manner. This has resulted in great opportunities for America's small companies to realize innovative technologies.

In this context, I find that the proposed settlement in the United Status vs Microsoft to be too narrowly drawn and to allow Microsoft too many opportunities to interpret the settlement to its advantage and to the detriment of the consumer.

The proposed settlement governs the market in desktop PCs running the Windows operating system. In most companies, this computing environment coexists with other platforms: Windows and non-Windows servers, desktop systems running other operating systems, handheld computing devices, etc. With the settlement of this case, the U.S. has an opportunity to foster as wide a range of choice as possible in all these areas of computing and to prevent Microsoft from extending its illegally maintained

monopoly. This will allow U.S. companies choose the best tools for a particular job enhancing the overall competitiveness of the U.S. economy.

I believe that there is a straightforward way for the U.S. to ensure this while allowing Microsoft the continued "freedom to innovate":

Microsoft should be required to publish technical specifications for all its network protocols, all its data formats, and all its application programming interfaces. The specifications should be sufficiently detailed to allow others to offer competing implementations and Microsoft should explicitly allow such implementations, providing, if necessary, royalty-free licenses to permit this.

Let me provide two examples:

- (1) Microsoft should publish the specifications of the file formats using by its "Microsoft Office" suite. This will enable other office suites to read and write files in a compatible way. These office suites will likely be available on non-Windows platforms, and this will mean that consumer will not be forced to purchase a Windows platform merely because of the need to read documents produced by Microsoft Office. A consumer may still choose to use Microsoft Office (because he perceives that it provides to the best way to produce his documents) and he may choose to use Windows because of his perception of its benefits. However, he will now have a choice. This will be at no cost to Microsoft's flexibility to create good software. On the contrary, it will offer an incentive to Microsoft to improve the implementation of its office suite since it will now need to compete against comparable compatible products.
- (2) Microsoft created a protocol called "Server Message Block" to permit files and printers to be shared between Windows systems. There is a free implementation of this protocol called Samba which allows the sharing to take place between Windows and non-Windows platform. This offers a clear benefit to consumers. Unfortunately, the Samba implementation is hampered by the need to "reverse engineer" the details of the protocol. Microsoft should remove this impediment by publishing the protocol and specifications of additional protocols, e.g., for user authentication.

Some of the restrictions in the proposed settlement are overly restrictive and should be removed. Two such examples are:

(1) The proposed settlement limits the provision of information

to companies which Microsoft considers to be bona fide businesses. This restriction would exclude the "Open Source" community which is responsible for Samba and Linux. Microsoft should make the information available to all, e.g., by publishing it on a publicly available web site, and the needed royalty-free licenses should permit implementations by anyone.

(2) The proposed settlement also allows Microsoft to avoid disclosure of information which would "compromise security". Unfortunately, this provision is open to abuse by Microsoft. Good security protocols can be (and are) published in full without compromising their security. This provision creates a perverse incentive to Microsoft to craft poor security protocols which rely on "security through obscurity", a rightly derided mechanism for computer security.

By requiring the publication this information, the U.S. would be stimulating innovation in the entire computer industry. The situation would be similar to two other periods where the establishment of computing standards lead to explosive growth: the creation of the PC market by the publication of the hardware standards for PCs, and the creation of the world wide web by the publication of standards for HTML and the underlying networking protocols.

I urge the U.S. to reject the proposed settlement and to create one which will have a clear benefit to the consumer.